U.S. Environmental Protection Agency
Science Advisory Board
Workgroup on Air Monitoring Plan

Allen, David

University of Texas

Dr. David Allen is the Gertz Professor of Chemical Engineering and the Director of the Center for Energy and Environmental Resources at the University of Texas at Austin. His research interests lie in environmental reaction engineering, particularly issues related to air quality and pollution prevention. He is the author of four books and over 125 papers in these areas. The quality of his research has been recognized by the National Science Foundation (through the Presidential Young Investigator Award), the AT&T Foundation (through an Industrial Ecology Fellowship) and the American Institute of Chemical Engineers (through the Cecil Award for contributions to environmental engineering). Dr. Allen was a lead investigator in one of the largest and most successful air quality studies ever undertaken: the Texas Air Quality Study. His current research is focused on using the results from that study to provide a sound scientific basis for air quality management in Texas. In addition, Dr. Allen is actively involved in developing Green Engineering educational materials for the chemical engineering curriculum. His most recent effort is a textbook on design of chemical processes and products, jointly developed with the U.S. EPA. Dr. Allen received his B.S. degree in Chemical Engineering, with distinction, from Cornell University in 1979. His M.S. and Ph.D. degrees in Chemical Engineering were awarded by the California Institute of Technology in 1981 and 1983. He has held visiting faculty appointments at the California Institute of Technology, the University of California, Santa Barbara, and the Department of Energy.

Chow, Judith

University of Nevada

Dr. Judith Chow is a Research Professor at Desert Research Institute in Reno, Nevada. She has directed the institute's Environmental Analysis Facility since its inception in 1985. For more than 28 years, Dr. Chow has conducted air quality studies and performed statistical data analysis. She is the principal investigator or co-investigator for the aerosol data analysis portions of the California Regional PM10/PM2.5 Air Quality Study (CRPAQS), Fresno Supersite, Interagency Monitoring of Protected Visual Environments (IMPROVE) carbon analyses, and the U.S. Environmental Protection Agency (EPA) Science to Achieve Results grant titled "Uncertainty of Thermal and Optical Carbon Analysis Methods." Dr. Chow has been principal investigator or a major collaborator in more than 50 large air quality studies (and many smaller ones) across the United States and in several other countries. She prepared and revised sections of the U.S. EPA's criteria document that pertained to chemical analysis and source emissions. Dr. Chow was the co-principal investigator on evaluation of aerosol measurement methods, sampling strategies, and databases for the U.S. EPA guidance documents on network design, continuous particulate monitoring, and aerosol measurements. As chair of the Air & Waste Management Association's Critical Review Committee, Dr. Chow is responsible for coordinating the journal article and the presentation that form the core of the association's annual conference. In addition, she serves as chair of the Editorial Review Board for the Journal of the Air & Waste Management Association. She has recently taken on the role co-editor-in-chief of Aerosol and Air Quality Research, an international journal. Dr. Chow earned her Sc.D. in Environmental Science from Harvard University in 1985, after receiving an M.S. in Air Pollution Control from Harvard in 1983. Her initial degree was a B.S. in Biology, earned in 1974 at Fu-Jen Catholic University in Taiwan. Dr. Chow is a member of the National Research Council's (NRC) Committee on Research Priorities for Airborne Particulate Matter, and serves on the Board on Environmental Studies and Toxicology at NRC. In March 2004, she joined the U.S. Department of Energy's Atmospheric Radiation Measurement Climate Research Facility (ACRF) Science Board. She is also a member of several other advisory panels for the National Academy of Sciences, the U.S. EPA, National Environmental Respiratory Center [New Mexico], and South Coast [California] Air Quality Management District. Other memberships include the Air & Waste Management Association and the American Association for Aerosol Research. Dr. Chow's sources of recent contract support include: U.S. EPA's National Center for Environmental Research (NCER), "Measurement, Modeling and Analysis Methods for Airborne Carbonaceous Fine Particulate Matter (PM2.5)" (an FY 2003 Science to Achieve Results (STAR) Program grant, the goal of which is to elucidate an improved understanding of the sources of atmospheric carbon); and carbon analysis of filter samples for the U.S. Department of Interior, National Park Service. Other sources of support include laboratory analysis for the U.S. Department of Defense, California Air Resources Board, Nevada Department of Environmental Protection, and Arizona Department of Environmental Quality.

Dellinger, H. Barry

Louisiana State University

Dr. Barry Dellinger is the Patrick F. Taylor Chair of the Environmental Impact of Treatment of Hazardous Wastes and Professor of Chemistry at Louisiana State University. He is the Director of the LSU Intercollege Environmental Co-operative and the Acting Director of the Biodynamics Institute. He is a member of the US-EPA Science Advisory Board Environmental Engineering Committee. From 1981 to 1998, he was Group Leader of Environmental Sciences and Engineering at the University of Dayton where he also held a joint faculty appointment. From 1978-1981 he was a Senior Project Scientist at Northrop Services Inc. He was a post-doctoral fellow at the University of Pennsylvania from 1976-1978. He holds a Ph.D in Physical Chemistry from Florida State University and B.S. in Chemistry from the University of North Carolina at Chapel Hill. His research interests include origin and control of toxic combustion by-products, thermal treatment of hazardous wastes, pathways of formation of dioxins, gas-phase and surface catalyzed elementary reaction kinetics, and sources/health impacts of environmentally persistent free radicals. He is a recipient of the Charles A. Lindberg Certificate of Merit, the Engineering and Science Foundation Award for Outstanding Professional Achievement, the Wohleben-Hochwald Researcher of the Year Award, the Ohio General Assembly Award for Research Excellence, and co-recipient of numerous EPA STAR research awards. (10/2002)

Demerjian, Kenneth

State University of New York

Dr. Kenneth Demerjian is currently a Professor in the Department of Earth and Atmospheric Science, and Director, Atmospheric Sciences Research Center, and the University at Albany, SUNY. Dr. Demerjian was awarded his M.S. and Ph.D. in physical chemistry from the Ohio State University in 1970 and 1973, respectively. He received his B.A. in chemistry from Northeastern University in 1968. His areas of expertise, and research activities and interests include: chemical kinetics and mechanistic pathways of elementary atmospheric reactions in polluted and clean atmospheres; instrumentation development and measurement of atmospheric trace gases and particulate matter; development and evaluation of air quality forecast models and diagnostic analysis of atmospheric processes within air quality modeling systems; and sources and evaluation of uncertainty in theoretical models of atmospheric processes, air quality, and pollutant exposure. Dr. Demerjian's leadership positions in national associations or professional publications include: Associate Editor, Atmospheric Environment, November, 2002 to present; Board on Oceans and Atmosphere NASULGC, November 2001 to November 2004; Member, UCAR Members' Nominating Committee, October 2001 to present; and Chairman, Committee for the Atmospheric Chemistry and Environmental Education in Global Change, 1994 to 1999. Dr. Demerjian's service on other advisory committees and professional associations includes: Member, Research Committee, Health Effects Institute, July 2002 to present; Member, National Research Council Committee on Atmospheric Chemistry, August 1999 to 2001; Co-Chair, Synthesis Team - NARSTO, October 1996 to March 2000; and Member, National Research Council Committee on Research Opportunities and Priorities for the Environmental Protection Agency (ROPE), November 1995 to June 1997.Dr. Demerjian's sources of recent grant and/or other contract support funding include: U.S. EPA, PM Supersite Cooperative Agreement, "PM2.5 Technology Assessment and Characterization Study - New York" (PMTACS-NY), January 15, 2000 - December 2004; New York Energy Research and Development Authority (NYSERDA), Contract, "Joint Enhanced Ozone and PM Precursors and PMTACS-NY Measurement Program," January 1999 - June 30, 2003; and New York State Department of Environmental Conservation, Environmental Bond Act Funds in support of PMTACS-NY, August 1, 1999 - July 2004.

Edgerton, Eric

Atmospheric Research & Analysis, Inc.

Mr. Eric Edgerton is President/Scientist, Atmospheric Research & Analysis, Inc. His areas of expertise include atmospheric chemistry, measurement of trace atmospheric species, and geochemical cycles of sulfur, nitrogen and carbon. Mr. Edgerton received his B.A. in Atmospheric Chemistry from Cornell University (1974) and his M.S. in Organic Chemistry from the University of Florida (1981).Mr. Edgerton's sources of recent grant and/or other contract support funding include: EPRI (Contract), ARIES Epidemiology Study and SEARCH PM Study; the Southern Company, SEARCH-II PM Study; EDEP BRACE, NOx/HNO3 Measurements; and SEASARM/VISTAS, Focus Site Operations.

Ensor, David S.

RTI International

Dr. David S. Ensor is the Director for the Center of Aerosol Technology and Senior Fellow at the Research Triangle Institute. While at RTI, Dr. Ensor has managed and conducted aerosol research in homeland security and environmental protection. Dr. Ensor has managed programs in aerosol research, filtration, air pollution control technology, particle sampling and characterization, indoor air quality, pollution prevention, exposure research, surface cleaning, testing of military and first responder protective garments for chemical and biological agents, microcontamination control, instrumentation development, and test methods development. Current clients include U.S. EPA, DARPA, U.S. Army and the CDC. Representative projects include Government Team Immune Buildings for DARPA, Government Team Spectral Sensing Biological Aerosols for DARPA, Development of a Nanofiber Air Filter for DARPA and Homeland Security Technology Verification for U.S.EPA. Dr. Ensor was Chair of the International Organization of Standards (ISO) technical committee (TC) 209 working group (WG 7) (1995-2004), which developed standard, ISO 14644 Cleanrooms and associate controlled environments, Part 7: Separative devices (clean air hoods, gloveboxes, isolators, and mini-environments), published in October 2004. He was President of the American Association for Aerosol Research (1988-1990) and is a Founding Editor of Aerosol Science and Technology. Dr. Ensor is a Fellow of the Institute of Environmental Sciences and Technology and served as its Technical Vice President (1991-1993). He is Fellow and member of the College of Fellows of the American Society for Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) and chaired the Technical Committee for Particles/Particle Removal Systems (1994-1997), which is responsible for a new air cleaner test method. Dr. Ensor is an Adjunct Professor of Environmental Engineering at the University of North Carolina at Chapel Hill. He has a Ph.D. in engineering and an M. S. in chemical engineering from the University of Washington and B.S. in chemical engineering from Washington State University. Before coming to RTI, Dr. Ensor managed industrial research and development of aerosol and gas instrumentation for Meteorology Research, Inc. Dr. Ensor has over 80 peer reviewed publications and over 200 presentations.

Felton, Henry (Dirk)

New York State Department of Environmental Conservation

Mr. Henry (Dirk) Felton is currently employed by the New York State Department of Environmental Conservation (NYSDEC) as a Research Scientist III. He has a Bachelor of Arts undergraduate degree in Physics from Kenyon College, Gambier Ohio (1987), and a Master of Science in Environmental Engineering from Stevens Institute of Technology in Hoboken, New Jersey (1993). He is also a Civil Engineer licensed in the State of New York. Mr. Felton's professional work has been entirely focused on ambient air monitoring. His first independent work involved setting up a monitoring network for criteria, toxic and tracer compounds around the Freshkills Landfill on Staten Island. Since then he has worked to optimize monitoring technology to operate a rural upwind PAMS site for NARSTO-NE, conducted several experiments to evaluate new automated mass measurement technologies, and has designed the PM-2.5 FRM and speciation program in New York. Mr. Felton is the lead for his Agency's participation in the New York PMTACS SuperSite program. Working as a collaborator with the NY SuperSite has allowed him to participate in all aspects of air monitoring from program development to state of the art methods evaluation. Mr. Felton currently serves as the chairperson for the NESCAUM Monitoring Assessment Committee (MAC). In addition, he participated in the OAQPS workgroup to develop the QA procedures for the PM-2.5 FRM program; and also participates in the new OAQPS workgroup examining new automated measurement technologies and in the workgroup working on the revision of CFR Part 58. Mr. Felton was recently asked to be a member of the EPA ORD committee for the "Synthesis and Integration" of the SuperSite program data and its application to State program planning needs. He also participated in a workgroup writing a chapter for the fourth edition of the Methods of Air Sampling and Analysis edited by Lodge. The majority of Mr. Felton's work is funded from the EPA through New York State 103 and 105 monitoring grants. He has a small project grant application currently pending with NYSERDA

Hopke, Phil

Clarkson University

Dr. Philip K. Hopke is the Bayard D. Clarkson Distinguished Professor at Clarkson University and the director of the Center for Air Resources Engineering and Science. Professor Hopke is the immediate past president of the American Association for Aerosol Research and was a member of the National Research Council's congressionally mandated Committee on Research Priorities for Airborne Particulate Matter and the Committee on Air Quality Management in the United States. He is a member of the National Research Council's U.S. Committee on Energy Futures and Air Pollution in Urban China and the United States. Professor Hopke received his B.S. in Chemistry from Trinity College (Hartford) and his M.A. and Ph.D. degrees in chemistry from Princeton University. After a post-doctoral appointment at M.I.T., he spent four years as an assistant professor at the State University College at Fredonia, NY. Dr. Hopke then joined the University of Illinois at Urbana-Champaign and subsequently came to Clarkson in 1989 as the Robert A. Plane Professor with a principal appointment in the Department of Chemistry. He has served as dean of the Graduate School, chair of the Department of Chemistry, and head of the Division of Chemical and Physical Sciences

Koutrakis, Petros

Harvard University

Petros Koutrakis is Professor of Environmental Sciences and director of the Environmental Chemistry Laboratory at Harvard University. He received his Ph.D. in environmental chemistry from the University of Paris. His research interests include human exposure assessment, ambient and indoor air pollution, environmental analytical chemistry, and environmental management. He is Technical Editor-In-Chief of the Journal of the Air and Waste Management Association, consultant to the EPA Science Advisory Board, and an advisor to the International Monitoring of Protected Visual Environments (IMPROVE), Pan American Health Organization (PAHO), World Health Organization (WHO), and the United Nations Environment Program (UNEP). He has served on several EPA review panels and chaired the EPA Review Panel for Research Proposals on Ambient Particle Modeling He is the PI of the EPA/Harvard Center on particle health effects; Co-PI on two NIEHS Program projects (Cardiac effects of air pollution). In addition, he is the PI of exposure assessment and air quality studies funded by EPA, HEI, EPRI, API, and DOE.

Lioy, Paul J.

UMDNJ - Robert Wood Johnson Medical School

Dr. Lioy, Professor of Environmental and Community Medicine, UMDNJ-RWJMS, is the Director of the Exposure Measurement and Assessment Division, and he and Dr. P. Georgopoulos are Directors of the Center for Exposure and Risk Modeling. His expertise includes human exposure to environmental and occupational pollution, multi-media exposure issues for metals and pesticides, research on air pollution theory of exposure to dose relationships, and participation in study exposure and/or effects of pollution on human health in urban and non-urban areas, and controlled environments. He has over 180 peer reviewed papers, and has been and is a member of numerous editorial boards. Dr. Lioy is a member of the U.S. EPA Science Advisory Board, the National Research Council Committee on Particles, the Colleagium Ramazzini, and International Joint Commission Air Quality Board for U. S. and Canada. He is President of the International Society of Exposure Analysis and was its 1998 recipient of the Wesolowski Award for Human Exposure Research.

Miller, Frederick J.

Chemical Industry Institute of Toxicology

Dr. Fred Miller is currently Vice President for Research at CIIT Centers for Health Research (CIIT). He has been at CIIT since February, 1991. Dr. Miller received a B.A. and M.S. in Statistics from the University of Wyoming. In 1968, he began a career as a commissioned officer in the U.S. Public Health Service (PHS). As a mathematical statistician involved with the design and analysis of studies on the effects of air pollutants on animals, Dr. Miller became interested in the use of such studies for assessing human health risks. He was assigned to the U.S. Environmental Protection Agency (EPA) when it was created in 1970. In 1971, Dr. Miller received an EPA long-term training award, which led to his doctoral research on the transport and removal of ozone in the lungs of animals and man. He received his Ph.D. in Statistics from North Carolina State University in 1977. During his career with EPA, Dr. Miller served as Director of the Health Effects Research Laboratory's Inhalation Toxicology and Environmental Toxicology Divisions. He was the senior author of the paper that established EPA's policy for considering inhalable particles of potential health concern to be those less than 15 µm in aerodynamic diameter as opposed to total suspended particulate matter. Dr. Miller was heavily involved in Agency activities leading to the development of the PM10 primary standards in 1987. Upon retirement from the PHS in 1989, Dr. Miller joined the faculty of Duke University Medical Center, continuing his long-standing interest in extrapolation modeling through his capacity as an Associate Director of the Duke Center for Extrapolation Modeling. Dr. Miller is interested in developing and implementing research strategies and projects that permit increased utilization of animal toxicological results to evaluate the likelihood of human risk from exposure to inhaled chemicals. His primary research interests include pulmonary toxicology, respiratory tract dosimetry of gases and particles, lung physiology and anatomy, extrapolation modeling, and risk assessment. Dr. Miller is internationally recognized for his research on the dosimetry of reactive gases. He is active in professional societies and consulting on environmental health issues. The author or co-author of more than 150 publications, Dr. Miller received a number of Scientific and Technical Achievement awards from EPA and is the recipient of the PHS' Outstanding Service Medal. He served as an ad hoc consultant to the EPA's Science Advisory Board and Clean Air Scientific Advisory Committee (CASAC) prior to being appointed in October 2000 as a CASAC member. Dr. Miller has also been an advisor to various other public organizations and currently chairs the Science Advisory Committee for the National Jewish Medical and Research Center's (Denver, Colorado) Environmental Lung Center. Dr. Miller is currently the Principal Investigator on a contract with Bespak, Europe, LT, for the conduct of respiratory dosimetry research aimed at targeting drug delivery to the respiratory tract via the nose.

Morandi, Maria

University of Texas - Houston Health Science Center

Dr. Maria Morandi is an assistant professor of Environmental Sciences and Occupational Health at the School of Public Health of the University of Texas at Houston. She holds a BS degree in Chemistry from the City College of New York (1978), and MS (1981) and Ph.D. (1985) degrees in Environmental Sciences from the Norton Nelson Institute of Environmental Medicine of New York University. Dr. Morandi is also certified in Industrial Hygiene (CIH) by the American Board of Industrial Hygiene. Dr. Morandi's areas of expertise include assessment of indoor, outdoor and personal air concentrations of airborne contaminants in community and occupational environments, development of methods for personal exposure monitoring of gas and particle-phase airborne chemicals, evaluation of the effects from exposure to airborne particles and ozone on human and murine alveolar macrophages, and effects from exposure to airborne particles, ozone, and air toxics in children with asthma. She has also performed statistical modeling of PM source contributions. Dr. Morandi served as a member of the Integrated Human Exposure Assessment Committee (formerly the Indoor Air and Total Human Exposure Assessment Committee) of the EPA Science Advisory Board from 1992 and 1998, and has agreed to serve again in this Committee starting in 2003. She was as member of the Research Strategies Advisory Committee between 1998 and 2003. Dr. Morandi has also served as member or chair of several EPA program review panels, the Agency for Toxic Substances Board of Scientific Councilors, and the National Institute of Occupational Health Study Section. Currently, she is a member of the Board of Scientific Counselors (BOSC) of the National Toxicology Program (NIEHS.), and the Chemical Exposures Working Group for the National Children Study (NCS). Dr. Morandi's sources of recent grant and/or other contract support funding include: (1) U.S. Environmental Protection Agency (several contracts on the use of passive dosimeters for monitoring indoor, outdoor and personal air concentrations of air toxics; a STAR grant on the effect of PM on murine and human alveolar macrophages; and an evaluation of the impact of attached garages on indoor and personal air concentrations of VOCs); (2) the Mickey Leland National Urban Air Toxics Research Center (impact of exposure to airborne carbonyls, PM and ozone on children with asthma;(3) The Health Effects Institute (HEI) (a population-based exposure study); and (4) NIOSH (for training Industrial Hygienists).

Poirot, Richard L.

Vermont Agency of Natural Resources

Mr. Richard L. Poirot has worked as an environmental analyst in the Air Quality Planning section of the Vermont Department of Environmental Conservation since 1978. His responsibilities include developing the technical support for State Implementation Plans (SIPs) to ensure attainment and maintenance of Federal and State standards for ozone, particulate matter, and regional haze. Given the rural nature and northeasterly location of Vermont, the influence of regional-scale pollution transport is of particular interest. Lacking sophisticated atmospheric chemistry modeling expertise and resources, Mr. Poirot has also developed interests in drawing inference on the nature of pollution sources from analysis of ambient measurement data, and in working in collaborative regional scientific of science/policy forums. For example, he is or has been a participant on Ambient Monitoring and Assessment Committee for the Northeast States for Coordinated Air Use Management, the Data Analysis workgroup for the Ozone Transport Assessment Group, the Science and Technical Support Workgroup for the FACA Subcommittee on Ozone, Particulate Matter and Regional Haze, the Monitoring and Data Analysis Workgroup for the Mid Atlantic/Northeast Visibility Union (MANE-VU), the EPA PM-2.5 Data Analysis workgroup, the Steering Committee for the Interagency Monitoring of Protected Visual Environments, and the US/Canada (Air Quality Agreement) Subcommittee on Scientific Cooperation. Mr. Poirot holds a B.A. degree from Dartmouth College, where he majored in geography and environmental studies. In November 2001, he was appointed by the Administrator of the U.S. Environmental Protection Agency (EPA) as a member of the Clean Air Scientific Advisory Committee (CASAC) of EPA's Science Advisory Board.

Russell, Armistead (Ted)

Georgia Institute of Technology

Dr. Armistead (Ted) Russell is the Georgia Power Distinguished Professor and Coordinator of Environmental Engineering at the Georgia Institute of Technology. Professor Russell arrived at Georgia Tech in 1996 from Carnegie Mellon University, and has expertise in air quality engineering, with particular emphasis in air quality modeling, air quality monitoring and analysis. He earned his M.S. and Ph.D. degrees in Mechanical Engineering at the California Institute of Technology in 1980 and 1985, conducting his research at Caltech's Environmental Quality Laboratory. His B.S. is from Washington State University (1979). Dr. Russell has been a member of a number of the National Research Council's committees, including chairing the Committee to Review EPA's Mobile Model and chairing the committee on Carbon Monoxide Episodes in Meteorological and Topographical Problem Areas, and serving on the committee on Tropospheric Ozone Formation and Measurement, the committee on ozone-forming potential of reformulated fuels and the committee on Risk Assessment of Hazardous Air Pollutants. Recently, he served on two EPA SAB subcommittees: the Clean Air Scientific Advisory Committee (CASAC) National Ambient Air Monitoring Strategy (NAAMS) Subcommittee and the subcommittee on Air Quality Modeling Subcommittee of the Advisory Council on Clean Air Compliance Analysis. He was also a member of the EPA FACA Subcommittee on Ozone, Particulate Matter and Regional Haze, the North American Research Strategy for Tropospheric Ozone and California's Reactivity Science Advisory Committee. Previously he was on the Office of Science, Technology and Policy's Oxygenated Fuels Program Review and various National Research Council program reviews, and a committee to review a Canadian NRC program. Dr. Russell is a member of the Air and Waste Management Association, American Association for the Advancement of Science, American Society of Mechanical Engineering, Tau Beta Pi, Sigma Xi and the American Association for Aerosol Research. Dr. Russell has won a variety of competitions for animations he has developed that depict the dynamics of pollutants have won a variety of prizes here and abroad, and his work was selected as a finalist for the prestigious Smithsonian Award for Computing in the Environmental Sciences. Recently, Prof. Russell led a multi-institutional effort to conduct air quality modeling of ozone, particulate matter and acid deposition to assist the Southern Appalachians Mountains Initiative to identify effective control strategies to improve air quality in Class I areas in the southern Appalachians. This work has been extended to detailed analysis of air quality strategies in Georgia, particulate matter modeling in the Southeast and Northeast, and development of a number of advanced numerical techniques for environmental modeling. For his service to National Research Council (NRC) committees, he was recently selected as a National Associate of the National Academies. Dr. Russell's funding comes from a variety of sources, including the FHWA (mobile source impacts on air quality), US NSF (atmospheric modeling), NIH (air quality impacts on health), U.S. EPA (modeling, monitoring and field data analysis), DoD (biomass burning), various states (VOC reactivity, air quality modeling and field experimental studies) and state organizations, and the chemical (reactivity analysis), automotive (modeling) and utility (modeling, field studies) industries.

White, Warren H.

University of California - Davis

Dr. Warren White is currently a Professional Researcher in the Crocker Nuclear Laboratory of the University of California at Davis. He was formerly a Visiting Professor at the Crocker Nuclear Laboratory. Prior to that, he was a Sr. Research Associate at Washington University in St. Louis. He is a member of the American Mathematical Society (AMS) and the Air & Waste Management Association (A&WMA). Dr. White's areas of expertise involve mathematics, atmospheric chemistry and optics, and aerosol science, with specific interests in trend analysis, attribution of effects to emissions, and the sensitivity of empirical models to measurement uncertainties. Dr. White has served the A&WMA on the Publications and Visibility Committees and as past Chair of the St. Louis Air Pollution Control Association. He has also served as Coordinator of the Symposium on Plumes and Visibility, Grand Canyon. Dr. White holds both a Ph.D. and M.S. in mathematics from the University of Wisconsin, in 1964 and 1967, respectively. He received his B.S. from the California Institute of Technology in 1963. Dr. White has worked with EPA on committees and panels, namely: Clean Air Science Advisory Committee (CASAC), 1996-2000; Review Panel for PM Air Quality Criteria Document, 1994-96, 2000-03; CASAC National Ambient Air Monitoring Strategy (NAAMS) Subcommittee, 2003; Subcommittee on Particle Monitoring, 1998-2003, Review Panel for NOx Criteria Document, 1990-94; and Subcommittee on Visibility, 1987-89. He has served on the following committees of the National Research Council (NRC): Haze in National Parks and Wilderness Areas, 1990-93; Committee on Meteorological Prediction, Analysis, and Research, 1990-94; Committee to Assess the North American Research Strategy for Tropospheric Ozone (NARSTO) Program, 1997-2002; and Committee on Research Priorities for Airborne Particulate Matter, 1998-2003. Dr. White has worked under a contract from National Park Service to Crocker Nuclear Laboratory to operate the IMPROVE monitoring network and also on a cooperative agreement between EPA and Washington University to operate St. Louis-Midwest PM Supersite. He has been a consultant to the Electric Power Research Institute (EPRI) on analysis of monitoring data from Atlanta, and to Environ Corp. on a test of source apportionment with simulated data.

Zeng, Yousheng

Providence Engineering & Environmental Group LLC

Yousheng Zeng, Ph.D., P.E. is the Air Quality Services Director for Providence Engineering and Environmental Group LLC. His areas of expertise include method development and implementation of air pollution monitoring (ambient and source, criteria pollutants and air toxics), air quality modeling (both dispersion modeling and receptor modeling), air quality laws and regulations, and air pollution control technologies. He is a member of several workgroups organized by the Louisiana Department of Environmental Quality (LDEQ), specifically the Highly Reactive Volatile Organic Compounds (HRVOC) Workgroup, the Title V Workgroup, and the AERMOD Modeling Guideline Workgroup. He served as an organizer and the facilitator of a forum for the LDEQ, industry, metropolitan planning organization, mayors of affected cities, and other elected officials to discuss Baton Rouge area ozone non-attainment "bump-up", its consequences, and possible solutions. He is a member of the Air and Waste Management Association (AWMA) and serves as the Secretary of the Association's Sources and Emissions Characterization Committee for a term from 2003 to 2005. He co-chaired the trial burn session for the 1999 national conference in Dallas on hazardous waste combustors sponsored by AWMA and EPA. Dr. Zeng served as an external peer reviewer for EPA Region 6 Regional Air Impact Modeling Initiative (RAIMI) Pilot Study, a regional modeling initiative for toxic air pollutants. Dr. Zeng received his B.S. degree in Analytical Chemistry from Sichuan University (China) in 1982, M.S. degree in Environmental Chemistry from Nankai University (China) in 1985, Ph.D. degree in Environmental Engineering from the University of Illinois at Urbana-Champaign in 1990, and MBA degree from the University of Texas at Dallas in 1998. He is a Professional Engineer (PE) registered in five states. As an adjunct professor at Southern Methodist University (SMU) in Dallas for six academic years, Dr. Zeng taught two graduate level courses, "Air Pollution Management, Regulations, and Public Policy" and "Air Quality Modeling". He is the instructor for three workshops on air quality related topics, in which over 150 professionals have participated. He has co-authored 16 peer-reviewed research papers published in national and international journals, chapters in five books, and sixteen papers presented to technical conferences. These publications were in the areas of air pollution source-receptor relations, air pollutants characterizations, and methods or models development. Although Providence Engineering and Environmental Group LLC provides services to Louisiana state agencies under contracts, it did not receive any grants from federal government, industry, or academia in the previous two years.

Zielinska, Barbara

Desert Research Institute

Dr. Barbara Zielinska currently holds the position as Research Professor and Director of the Organic Analytical Laboratory at the Division of Atmospheric Sciences of the Desert Research Institute (DRI) in Reno, Nevada. The DRI is an autonomous research division of the University and Community College System of Nevada (UCCSN). DRI was created in 1959 by a special act of the Nevada State Legislature. Under the act and subsequent actions of the University Board of Regents, DRI is charged with conducting basic and applied research in environmental science. The institute employs more than 400 professional, technical, and support staff. Dr. Zielinska has been active in the air pollution field for more than 20 years and specializes in the analysis of organic compounds in ambient air and in emission sources. Her list of publications includes over 80 papers concerning the analysis of ambient and source samples for polycylic organic hydrocarbons (PAH), nitro-PAH and other toxic air pollutants. She is currently the principal investigator of the following grants and contracts: Section 211(b) tier 2 high-end exposure screening study of baseline and oxygenated gasoline (funded by the American Petroleum Institute); chemical characterization of the exhaust from heavy-duty diesel vehicles to evaluate the performance of diesel technology options, including fuel and catalyst (funded by DOE/NREL, SCAQMD and BP/ARCO); chemical characterization of heavy-duty vehicles, tested on chassis dynamometer (Coordinating Research Council); and the characterization of chemical composition and ambient concentrations of particulate and semi-volatile organic compounds for the California Regional PM2.5/PM10 Air Quality Study (CRPAQS). Dr. Zielinska's recently completed research projects include: detailed chemical characterization of diesel and gasoline exhaust for the DOE/NREL comparative toxicity study; apportionment of diesel emissions in underground mines where heavy-duty diesel equipment is used and assessment of miner's exposures to these emissions (funded by the Health Effects Institute); chemical analyses of collected diesel particulate matter samples in the CRC E-43 project (DOE/NREL); and analysis of speciated volatile organic compounds for the 2000 Central California Ozone Study and 1997 Southern California Ozone Study-NARSTO (CARB). Dr. Zielinska received her M.Sc. degree from the Lodz University of Technology, Poland, and her Ph.D. degree from the Polish Academy of Sciences, both in Chemistry. In May 2001, she was appointed by the Administrator of the U.S. Environmental Protection Agency (EPA) as a member of the Clean Air Scientific Advisory Committee (CASAC) of EPA's Science Advisory Board.